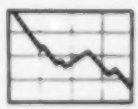
GUIDELINES FOR THE PREPARATION

OF MUNICIPAL OIL SHORTAGE

CONTINGENCY PLANS

Ministry
of
Energy
Ontario



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for the Ministry of Energy
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APPENDIX A - MUNICIPAL GUIDELINES: STEPS TO BE TAKEN IN THE PREPARATION OF AN OIL SHORTAGE CONTINGENCY PLAN

APPENDIX B - CLASSIFICATION OF GOVERNMENT SERVICES

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REFERENCES

1. INTRODUCTION

The following guidelines have been prepared to assist municipalities in the preparation of oil shortage contingency plans. The guidelines are generic in nature and apply to all types of municipal organizations, including villages, towns, townships, cities, counties[1] and regional municipalities.

The guidelines should be read in conjunction with completed municipal oil shortage contingency plans, which demonstrate how different municipal structures have undertaken oil shortage contingency planning. Completed municipal plans for each type of municipal organization (as listed above) are available from the Ministry of Energy.

These guidelines were first drafted by the Ministry of Energy in 1984. The experience gained in the preparation of several municipal contingency plans was used as a basis for revising the guidelines. Comments and suggestions for further improvements are welcome.

The application of these guidelines will result in the preparation of a detailed oil shortage contingency plan. However, it is recommended that smaller municipalities with insufficient staff or resources to draw up a detailed plan, complete, as a minimum, sections 3.1.1, 3.1.2, 3.2.1, 3.4.1, 3.5.1.4, 3.5.2, 3.5.3.1, 3.6.1, 3.6.2, 3.7, 3.8, 3.9 and 3.10. Of course, municipalities without transit do not have to consider section 3.5.2.

2. BACKGROUND

The effects of the two major oil supply disruptions in the 1970s have made industrialized nations increasingly aware of their need to plan for such emergencies. Dependence on imported oil from OPEC nations and political instability in the Middle East have forced western countries to initiate protective actions. It was for this reason that the International Energy Agency (IEA) was formed in 1974, by a number of industrialized oil-consuming countries, who signed a treaty agreeing to share the supply of oil during future disruptions. Canada was one of the original countries to join the IEA. Commitment to this agreement remains strong today and is likely to be so for the foreseeable future.

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1. For the purposes of these guidelines, a county will be referred to as a municipality, even though a county is not defined as a municipality in the Emergency Plans Act 1983.

Federal Emergency Programs

Canada, as a member of IEA, is committed to sharing oil internationally in an emergency, even if it necessitates reducing oil supplies within Canada. To support the IEA commitment, the federal government passed the Energy Supplies Emergency Act (ESEA) and created the Energy Supplies Allocation Board (ESAB) to develop allocation and rationing programs. Both the Act and ESAB were terminated in 1976 but were reconstituted in 1979 when shortages became a concern once again. A new Act was then passed, and the board was reestablished to update the existing programs and develop new ones.

Once a national emergency is declared, this board will allocate crude oil and petroleum products to wholesale distributors and retailers. The Act provides that, when a controlled oil product is in such short supply that mandatory allocation is no longer effective, the mandatory allocation program can be extended to include rationing, which controls the purchase and sale of oil products at all levels, including that of the final consumer. The rationing program is designed to control the distribution of fuel through roadside retail outlets only.

Contingency Planning in Ontario

In order to support the programs of the Energy Supplies Allocation Board during a shortage and possibly manage a shortage before the Energy Supplies Emergency Act is declared, Ontario initiated an energy contingency planning program in 1979. The Ministry of Energy was designated as the Lead Ministry for managing energy supply disruptions, and a program office was established in 1981 to develop an oil shortage contingency plan for Ontario. This plan is now complete and the municipal component is available from the Ministry of Energy.

The goal of the provincial plan is to maintain public health and welfare and economic stability in the event of an oil shortage, either perceived or real.

More specifically, the objectives of the provincial oil shortage contingency plan are to:

- reduce demand;
- ensure public awareness, understanding and appropriate public reaction in coping with a shortage;
- maintain essential government functions;
- demonstrate effective, responsible leadership;
- assist in ensuring that shortages are equitably shared; and
- ensure a coordinated approach among key groups.

Need for Contingency Planning at the Municipal Level

In cooperation with the Province, municipalities will have a critical role to play in the management of an oil shortage. With their knowledge of local needs, municipalities will be able to identify and implement effective measures to reduce oil consumption. In addition, because the municipal level of government is the closest to the people, municipalities will be able to respond quickly to the concerns of its citizens. As regulators and administrators of both local and provincial programs, municipalities have the necessary resources to effectively deliver, coordinate and implement a contingency planning program.

To this end, it is imperative that each municipality identify a course of action for managing the shortage and determining municipal roles and responsibilities in the implementation of energy demand restraint measures.

The Emergency Plans Act 1983 gives explicit statutory power to municipalities to plan for emergencies (section 4 of the Act). This could include contingency planning efforts for oil shortages.

An oil shortage contingency plan benefits a municipality in the following ways. A plan:

- provides immediate short-term benefits since the plan's energy consumption data can be used for determining the effectiveness of energy conservation programs as well as energy contingency initiatives;
- ensures readiness in case of an oil shortage;
- allows for the solution of local problems while still complementing federal and provincial plans.

Municipal Oil Shortage Contingency Plan

The Municipal Oil Shortage Contingency Plan is a tool for assisting in the management of an oil supply disruption. The plan should describe a step-by-step approach to controlling the emergency. This should include documentation on how to:

- coordinate all areas of municipal responsibility;
- communicate with all role players both at the local and the provincial levels; and
- initiate and terminate implementation of the plan.

More important, the plan should identify energy demand restraint measures possible in the following areas of municipal involvement:

- municipal services and operations;
- public transit; and
- community outreach.

Municipalities will need to maintain their operations and services and at the same time reduce oil consumption where possible. Essential services such as police and fire protection, water supply, sewage treatment, public health, and garbage collection and disposal will need to be continued. Services of a less essential nature will need to be reviewed in order to identify ways of cutting back fuel consumption.

Public transit wil be required to accommodate more riders since private auto travel will be discouraged. Transit authorities may have to operate at full capacity and possibly increase the capacity. While such actions may result in higher energy consumption by public transit, a significant reduction in oil consumption by private cars is anticipated as a result.

Municipalities will be encouraged by the Province to establish a community outreach program promoting the voluntary reduction of oil consumption throughout the community.

To ensure consistency with federal and provincial contingency plans the municipal plan should recognize the following stages of an oil shortage for planning purposes. Neither the stages nor the assumptions they imply are intended to predict the probable course of a shortage.

Pre-Emergency Stage - Growing Concerns

i) Alert of tightening supplies and ongoing monitoring of current situation

ii) Increase in state of readiness for a shortage

iii) Fuel-saving information publicized and programs advocated

Stage 1 - Perceived Shortfall

i) Perceived supply disruption due to media reports potentially causing imbalance in supply; no actual shortages

ii) Mandatory demand restraint measures invoked in the public sector (provincial and municipal levels)

iii) Voluntary compliance with measures requested from the private sector and general public

Stage 2 - Moderate Shortfall

i) Actual though moderate shortage below 7% of supplies

ii) Mandatory measures continue for the public sector and are introduced to the private sector and general public

Stage 3 - Severe Shortfall

i) Severe shortages above 7% of supplies

ii) Federal programs under Energy Supplies Emergency Act introduced

iii) Full implementation of mandatory measures in the public and private sectors by the province and municipalities to reconcile situation within their jurisdictions

iv) Actions required to protect health, safety and welfare of the public in support of federal programs.

3. CONTINGENCY PLANNING STEPS

Introduction

The first step requires Council to recognize the need for and importance of an oil shortage contingency plan. Once the decision has been made to prepare such a plan, the following steps are recommended. THE FOLLOWING SECTION IS TO BE READ IN CONJUNCTION WITH THE FOLD-OUT CHART IN APPENDIX A.

3.1 Initial Requirements

3.1.1 Council to Pass Resolution to Prepare an Oil Shortage Contingency Plan

It is important to generate municipal interest and a commitment to the preparation of an oil shortage contingency plan. That interest should be initiated by Council through the passing of a resolution agreeing to prepare such a plan. The resolution should then be circulated to municipal department heads, who in turn would be relied upon to contribute to the preparation of the plan.

3.1.2 Council to Appoint Technical Steering Committee to Oversee the Preparation of the Contingency Plan

The Technical Steering Committee should consist of local Emergency Measures Organization or Municipal Energy Coordinator, CAO, heads of municipal departments recognized as major fuel users (e.g. Transit, Public Works and Parks and Recreation) and, as an option, a representative of the local oil industry. The latter could provide the committee with information on local oil supply availability in the event of a fuel distribution problem in the area.

3.2 Review of Resources and Capabilities

3.2.1 Review Local Resources and Capabilities and Identify Staff Available to Prepare an Oil Shortage Contingency Plan

The resources available to assist in the preparation and implementation of a contingency plan will vary considerably from one municipality to another. Therefore, the Technical Steering Committee should:

- o determine funding availability for contingency planning, including eligibility for funding assistance from the Joint Emergency Planning Program (JEPP)[1];
- o review available staff and choose an Oil Contingency Coordinator to be responsible for preparing the contingency plan;
- o determine requirements for additional help.

The plan should be prepared by someone possessing the following qualifications:

i) familiarity with municipal organizational structure and staff;

ii) knowledge of services and activities offered by the municipality;

iii) familiarity with municipal fuel consumption requirements;

iv) excellent communication skills;

v) previous experience in preparing contingency planning programs, if possible.

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1. "JEPP was conceived to encourage and support cooperation among all levels of government in working towards a national capability to meet emergencies of all types with a reasonably uniform standard of emergency services. It is a possible source of funding assistance to defray some of the costs of achieving higher standards of emergency communications, heavy duty emergency response equipment, etc." (Ontario Ministry of the Solicitor General, JEPP Joint Emergency Planning Program, page 1, October, 1986).

3.3 Preparation of Work Program

3.3.1 Oil Contingency Coordinator to Prepare a Detailed Work Program

The work program should detail all tasks to be completed in preparing the contingency plan. The work program should be based on these guidelines and should include:

- o description of each task;
- o methodology - how to undertake each task;
- o end product of each task (e.g. memo, map or report);
- o timing (i.e. deadline for task completion);
- o level of effort (i.e. number of person days);
- o budget (if required).

The work program should be circulated to the Technical Steering Committee for review and comments. The work program should also be circulated to those individuals likely to be involved in the plan's implementation and who are not represented on the Technical Steering Committee. This would provide a good opportunity for feedback and may generate some interest in the study. As an option, the municipality may wish to circulate the work program to the Ministry of Energy for comments. Revisions to the work program should be made once all comments have been received.

3.4 Identification of Goals and Objectives

3.4.1 In Consultation with the Technical Steering Committee, the Oil Contingency Coordinator Should Identify the Goals and Objectives of the Contingency Plan

Goals and objectives should be based on the desired results of the plan in addressing three key areas of municipal involvement, i.e., municipal services and operations, transit, and community outreach and education (see completed municipal plans for examples of goals and objectives).

3.5 Data Collection and Analysis

3.5.1 Analysis of Municipal Services and Operations

3.5.1.1 Through existing municipal documentation (e.g. municipal profile) develop an understanding of the municipal structure and the decision-making process. Identify the key responsibilities of each municipal department.

3.5.1.2 For a selected base year, determine fuel consumption by type, by department and by season (i.e. summer and winter). At the municipal level, fuel is used mostly for transportation and to a lesser extent for space heating. The profile should identify fuel consumed by municipal vehicles and equipment as well as by private cars used on municipal time.

Table 1.1 could be used as a guide to summarizing the fuel consumption of municipal vehicles and equipment by department and by season (i.e. summer and winter). A list of equipment and vehicles could be a useful appendix to the plan. Possible sources of information include the Public Works Department, the Finance Department or a central equipment authority if in place. Some municipalities have computerized records of equipment and maintenance. If data are unavailable, department heads should be asked to estimate fuel consumption.

Table 1.2 could be used to record fuel consumption in municipal oil-fired buildings.

Table 2 could be used to summarize fuel consumption for private auto use on municipal time by department. The Finance Department should have records of this information.

3.5.1.3 Using the results of the energy consumption profile, identify the major users of fuel in the municipality (e.g. Public Works, Police, Parks and Recreation Departments). For each department considered to be a major fuel user, complete the following tasks:

i) List key fuel-consuming activities and responsibilities; if possible, identify or estimate fuel consumption by activity.

ii) Each department is to classify its services (i.e. activities and responsibilities) as most essential, less essential, or least essential, using the federal ranking of services (see Appendix B) and the municipality's own priorities, and determine fuel consumption in each classification category[1]. The classification should show which services are essential and which could be reduced by varying degrees if fuel supplies became insufficient. The departmental analyses can be summarized into a comprehensive municipal fuel consumption data profile as illustrated in Table 3. The classification of services by major fuel-consuming departments and the determination of annual fuel consumption in each class will help decision makers determine where oil consumption can be reduced. It will also assist in selecting restraint measures having the least impact on public health and welfare and on economic stability.

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1. The Governments of Canada and Ontario use different classification terminology. Ontario uses the terms most essential, less essential and least essential to classify internal government operations. The Government of Canada uses the terms critical, essential and non-essential to classify government services.

TABLE 1.1

MUNICIPAL FUEL CONSUMPTION PROFILE: MUNICIPAL VEHICLES AND EQUIPMENT

DATE: _____

USAGE BY FUEL TYPE (Litres)

	Name of Municipal Department	Regular Gas	Unleaded Gas	Diesel	Other (Specify)	Total
Summer						
	Subtotal					
Winter						
	Subtotal					
	TOTAL					

TABLE 1.2

MUNICIPAL FUEL CONSUMPTION PROFILE: OIL-FIRED MUNICIPAL BUILDINGS

DATE: _____

	Building Address	Litres of Oil Consumed	Recent Conservation Initiatives
Summer			
	Subtotal		
Winter			
	Subtotal		
	TOTAL		

TABLE 2

MUNICIPAL FUEL CONSUMPTION PROFILE:
PERSONAL AUTO USE
DATE: _____

Municipal Department	Kilometres	Fuel Usage (Litres)*	% of Total Fuel Consumed
TOTAL			

Note: If only mileage is available, an estimate of 10.7 litres/100 km could be used as an average for determining fuel usage. Time permitting, the profile should also include a breakdown of fuel use by month of the year in order to determine seasonal fluctuations.

iii) Identify the municipality's fuel storage capacity by fuel type. Compare storage capacity to fuel consumption by fuel type as identified in the profile in order to determine duration of supply in the event of a shortage.

3.5.1.4 Meet with the heads of each major fuel-consuming department identified in the profile. These meetings are intended to discuss possible energy restraint measures within those services primarily classified as less essential or least essential.

The objective of this task is to produce a list of restraint measures and to quantify anticipated reductions in fuel consumption (refer to Appendix C for a list of possible restraint measures).

TABLE 3

ANNUAL MUNICIPAL FUEL CONSUMPTION PROFILE (LITRES)

TRANSPORTATION CONSUMPTION DATA

MUNICIPAL DEPARTMENT	OIL CONSUMPTION BY CLASSIFICATION CATEGORIES (IN LITRES)*						DEPARTMENTAL TOTALS	
	Most Essential		Less Essential		Least Essential			
	Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel	Gasoline	Diesel
Public Works								
Police								
Parks and Recreation								
etc.								
TOTAL								

* If other oil-based fuels are used such as aviation fuel, additional columns will need to be added.

MUNICIPAL OIL-FIRED BUILDINGS

OIL TYPE	OIL CONSUMPTION BY CLASSIFICATION CATEGORIES (IN LITRES)*			TOTALS
	Most Essential	Less Essential	Least Essential	
Oil #2				
Other (Specify)				
TOTAL				

It is recommended that the municipality consider only those measures that can:

i) realistically be implemented in their jurisdiction;

ii) address the underlying problems of the community's long-term energy dependence if this is an issue; and

iii) satisfy the municipality's particular circumstances and needs.

In order to evaluate how appropriate and effective a particular measure might be it is necessary to consider the following questions:

i) What type and degree of shortage does the measure address? Does it result in reduced fuel consumption? How much? How quickly?

ii) How quickly and at what cost can it be implemented? How easily can it be implemented?

iii) Is it fair and equitable?

iv) How long can it be in place without adversely affecting public health, public safety and economic stability?

v) How will it affect staff and work load? Will there be layoffs?

The end result evaluating each measure should be documented in chart form as suggested in Table 4.

TABLE 4

EVALUATION OF ENERGY RESTRAINT MEASURES

Stage (When?)	Demand Restraint Measure (What?)	Action in a Shortage (How?)	Responsibility for Action (By Whom?)	Results and Implications (Why?)

3.5.2 Analysis of Transit Service

3.5.2.1 Collect data on existing ridership and capacity by route and by trip. In order to identify opportunities for expanding transit capacity, transit data should be collected, particularly for peak hours of operation. Ask the transit authority manager to assist you in collecting the required data.

A rough estimate of peak-period and peak-hour ridership can be determined from the number of households in the transit service area (see Appendix D for details).

The following calculations (generally applicable to all municipalities with transit) will indicate when transit capacity problems will occur, depending on the level of fuel shortage. For the purposes of these guidelines, shortage levels ranging from 5% to 15% were used as examples.

		Additional transit riders to be accommodated for work trips during:	
		Peak Period	Peak Hour
5% Shortage	Short-term	.009 X H	.005 X H
	Long-term	.012 X H	.007 X H
10% Shortage	Short-term	.017 X H	.010 X H
	Long-term	.024 X H	.014 X H
15% Shortage	Short-term	.026 X H	.015 X H
	Long-term	.036 X H	.021 X H

Note: H = Households

In addition, data on fuel consumption should be collected in order to determine the duration of fuel supply during a shortage.

3.5.2.2 Compare additional anticipated ridership with existing available capacity. Determine at which stage of an oil shortage the existing capacity would be reached or exceeded. Identify measures, such as the provision of additional buses, to be considered once the transit system has reached capacity. Measures to improve fuel efficiency should also be considered; they include reducing dead heading and idling, reducing vehicle stops and cutting inefficient routes (see completed municipal plans for a detailed list of possible transit measures).

3.5.3 Determine Opportunities for Community Outreach and Public Education

3.5.3.1 Identify the municipality's role in public education and community outreach. Review all possible restraint measures that could apply to the general public (e.g. space heating conservation and ridesharing).

Ideas for a public education program should be identified in the plan. Community information programs tend to be some of the most effective methods for dealing with such situations. These programs should be coordinated with those of provincial and federal governments to ensure a consistent approach.

Develop a public information program that describes how information will be dispersed throughout the community and how the media will be kept informed. Specific information to be delivered through the public information program includes:

i) all possible data on how to use transit services throughout the community;

ii) information on how to get involved with ridesharing;

iii) latest information on service station hours and the availability of gasoline and diesel fuel;

iv) latest information on the availability of heating oil;

v) latest information on the availability of municipal services;

vi) information on municipal fuel conservation programs with statistics on how much fuel is being saved;

vii) any other information that would assist the public.

3.5.3.2 Contact major public and private sector employers in the municipality through a survey questionnaire (see Appendix E for example) to determine their willingness to participate in voluntary energy restraint programs, primarily ridesharing. As well, the municipality should take this opportunity to encourage major employers to prepare their own contingency plans to complement the municipal and provincial plans.

In keeping with the goal of maximizing efficiency, it is assumed that major employers are sufficiently aware of the techniques for reducing the need for space heating and processing energy. Therefore, while a wide range of information should be made available to industry, the municipality should not focus on this aspect of fuel consumption.

3.5.3.3 Analyze survey results and develop a list of companies and contact persons to be called upon for participation in a community-wide ridesharing program in the event of an oil shortage. Identify municipal requirements for establishing a ridesharing program and obtain necessary information from the Ministry of Transportation and Communications.

3.5.3.4 Prepare a fuel supply map of the municipality (showing gas station sites and local fuel supply network). The map is to be used as a guide in the event the oil shortage necessitates fuel allocation at the federal level. For example, the map could be used to track gasoline availability at service stations.

3.5.3.5 Identify and contact key oil-consuming public facilities, including hospitals, schools, nursing homes and social service agencies. Explain the municipality's contingency plan. The intent here is to be aware of which public facilities operate on oil and thus require attention during an oil shortage.

3.5.4 Reaffirm Goals and Objectives

Based on the findings to date, reaffirm and/or revise the plan's goals and objectives for incorporation in the implementation strategy.

3.6 Development of Implementation Strategy

3.6.1 Recommend Realistic Measures

Using the information collected, develop demand restraint measures options that will:

- maintain a high level of municipal service while reducing fuel consumption; (A list of restraint measures should be developed by municipal department heads who are best suitable to recognize possible ways of cutting back on fuel consumption.)
- maximize the efficiency of transit as an alternative to private autos;
- promote community-wide energy restraint.

See Appendix C for a list of possible energy-demand restraint measures.

3.6.2 Identify Implementation Role Players and Responsibilities

Key role players to be considered should include:

i) Emergency Measures Organization

The Emergency Measures Organization (EMO) should serve as the focal point for the dispersal of information and implementation of the contingency plan. Responsibilities may include:

- o communicating all "Council Approved" announcements to the public;
- o coordinating all community outreach and public education programs dealing with energy restraint measures;
- o coordinating the activities of the Energy Steering Committee;
- o advising department heads of their responsibilities as identified in the contingency plan;
- o reporting to Council;
- o participating in the organization of municipal ridesharing programs; and
- o conferring with staff of the Ministry of Energy's Standby Organization.

ii) Energy Steering Committee

This committee should continue with its involvement in municipal contingency planning by participating in the plan's implementation. As an alternative, the plan may recommend that an existing municipal committee (e.g. energy management committee) assume the following implementation responsibilities:

- o acting as a review committee for Council;
- o providing advice to the EMO on the implementation of restraint measures;
- o acting as a direct link to the consumer for advice from industry, utilities, energy suppliers, etc.;
- o generating all the public statements for the municipality during the shortage.

The Steering Committee should be chaired by the Chief Administrative Officer or other high ranking municipal official.

iii) Emergency Operations Centre

It will probably be necessary to establish an Emergency Operations Centre as a focal point from which all emergency actions can be directed. Such a centre could be established on an ad hoc basis as needs dictate. Procedures for the centre's operation, including hours of operation, staff requirements and services to be provided, should be prepared in advance.

The plan should identify a possible location (e.g. municipal building) for the centre.

With upper-tier municipalities it may be advisable to establish a separate communications centre to accommodate the staff responsible for delivering the public information program.

iv) Municipal Department Heads

Municipal department heads would be required to reduce energy consumption in their departments while attempting to maintain a desirable level of municipal service. The plan should provide municipal department heads with sufficient flexibility to achieve the desired cutbacks.

v) Transit Authority Manager

The manager and support staff of the transit authority should be responsible for implementing those measures intended to increase transit efficiency and ridership. The transit manager should be required to report all progress to the Steering Committee.

vi) Coordinators at Major Employers

Coordinators appointed by major employers wishing to participate in the implementation of the contingency plan (under ridesharing for instance) could assume the following responsibilities:

- conferring with EMO staff regarding steps to be taken in setting up a ridesharing program and other voluntary measures to reduce consumption;
- organizing a ridesharing program for the company. As a minimum, this would require establishing a sign-up board where individual employees could look for ridesharing partners;
- designating preferred parking spaces for high occupancy vehicles in the company parking lot; and
- negotiating with management for the provision of vans or buses to assist ridesharing program participants.

3.6.3 Linkages Between Role Players

Communication linkages between role players should be identified so as to clarify the contingency plan decision-making process. This will ensure that each role player knows whom to report to and discuss concerns with in order to implement the plan effectively (see Figure 1 for an example of a communication linkage diagram).

3.7 Testing Procedure

Provisions should be included for testing the plan in order to educate those responsible for its implementation as well as to inform those who might be affected by it. The plan should be tested regularly to ensure that it will be effective in a real emergency. All staff required to make the plan operational should participate in the test. Equipment, such as telecommunication networks and computers, that would be needed in implementing the plan should also be tested. Once the testing is complete the plan can be revised as necessary.

The following steps should be included in the test:

- Conduct the test regularly. Depending on who is available, it should be coordinated by the Municipal Energy Coordinator, the Emergency Measures Organization Coordinator or the Clerk.
- Identify all role players involved in the plan's implementation.
- Determine the oil shortage level to be used as a basis for the test.
- Request all role players to identify recommended measures for achieving the targeted cutback (i.e. selected oil shortage level).
- Document test results; identify problems and concerns; and recommend improvements to the contingency plan.

3.8 Review and Updating Process

The plan should include all steps to be taken for its annual review by all those responsible for its implementation. The plan should designate a position responsible for its maintenance so that the plan is always kept up-to-date.

COMMUNICATION LINKAGES AT LOCAL MUNICIPAL LEVEL

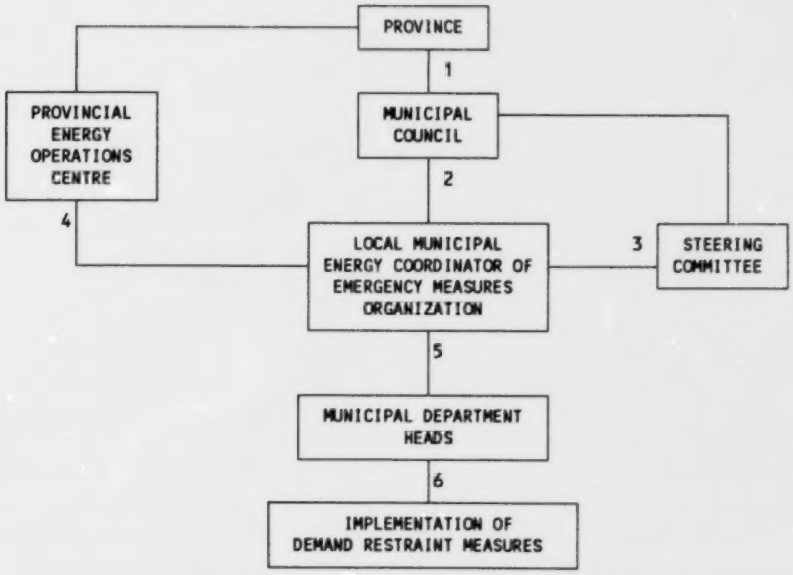

FIGURE 1

1. Province notifies the head of Council regarding stage-by-stage oil shortage developments.

2. The head of Council notifies the local municipal energy coordinator. (The appointment of an energy coordinator is required at the pre-emergency stage.)

3. Local municipal energy coordinator is a member of the Steering Committee.

4. The local municipal energy coordinator reports to local Council and liaises with the Provincial-Municipal Coordinator and Liaison Officer through the provincial Energy Operations Centre.

5. The local municipal energy coordinator, in conjunction with municipal department heads, is to review the contingency plan to identify the roles and responsibilities of each department in reducing energy consumption.

6. Municipal department heads are responsible for implementing necessary measures to achieve the targeted cutback.

3.9 Preparation of the Plan Itself

Once all background research and data collection are complete, the preparation of the contingency plan itself becomes a relatively straightforward task. The degree of detail incorporated into the plan will again be influenced by the resources available. The contingency plan should include the following components:

i) Introduction

Provides the rationale for municipal contingency planning for oil shortages. Discusses Canada's, Ontario's and the municipality's vulnerability to oil supply disruptions and the need to plan for such emergencies at the municipal level.

ii) Goals and Objectives

State the plan's goals and objectives. In the case of a regional municipality or county, the objectives should include the coordination of planning with local municipalities and the development of a region- or county-wide communication network.

For each of the three areas of municipal involvement, the plan should identify realistic goals and objectives. Examples include:

- maintaining a high level of public service while reducing energy consumption where possible by distinguishing between essential, less essential and least essential services;
- improving transit efficiency and increasing transit ridership in the municipality;
- promoting, in conjunction with the Province of Ontario, the implementation of demand restraint measures intended to result in community-wide reduction in fuel consumption.

iii) Legal Authority

The municipality's legal authority (under the Emergency Plans Act 1983) to prepare an oil shortage contingency plan should be identified in this section. The nature of the legal authority for the plan at the municipal level should be stated.

iv) Organization Structure and Responsibility

A description of the organization structure for implementing the plan should be included. The structure usually includes Council, Emergency Measures Organization, Steering Committee, Emergency Operations Centre, Municipal Department Heads, Transit Authority Manager and representatives from major employers. In the case of regional municipalities that are coordinating planning with local municipalities, the structure can be quite complex.

v) Trigger Mechanism

The plan should identify the trigger mechanism at the provincial and the municipal level.

The following triggering mechanisms are commonly identified in municipal plans.

- The province will alert the Head of Council that an oil shortage may develop.
- The Head of Council, through consultation with Council, will make the decision whether to invoke the contingency plan immediately or at any point later as the situation develops.
- Even without notification from the Province, if there is some reason to believe that a local oil shortage, real or perceived, may be developing, Head of Council may consider invoking the contingency plan.

vi) Fuel Consumption Profile

The plan should document fuel consumption by municipal department, including transit, for a selected base year. This information is intended to show the quantity of oil-based fuels used by each municipal department for transportation and space heating purposes. As discussed in Section 3.5.1, transportation fuel use is calculated for municipal vehicles and equipment and for private auto use on municipal time. Key components of the profile may include:

- breakdown of services provided by each municipal department;
- fuel use by department;
- fuel use by season or by month;
- estimate of fuel use by activity or responsibility;
- fuel storage capacity and supply duration;
- classification of municipal services as essential, less essential and least essential.

vii) Restraint Measures

The plan should include documentation of demand restraint measures to be implemented by the municipality to reduce consumption in municipal services and operations, public transit and the community at large.

Specific action to be taken by the municipality during each stage of a shortage should be documented through a series of demand restraint measures that form the basis of the municipal plan.

Appendix C contains a comprehensive list of measures that can be implemented by municipalities during the various stages of an oil shortage.

viii) Public Information Program

The plan could include a public information program that designates someone to manage the program and establishes a unique phone number. This section of the plan should document the findings of task 3.5.3.1.

ix) Implementation

The plan should identify who in the municipality is responsible for its implementation. The plan could include a communications strategy as part of the implementation process as described in Section 3.6.2 and Figure 1.

x) Testing and Review Procedures

Describe the frequency with which the plan is to be tested and reviewed; assign responsibility for initiating the process and describe how the test and review are to be conducted.

Once the first draft is complete, circulate the plan for review and comments, particularly to department heads affected by its proposed measures or involved in its implementation. Revise the plan in accordance with comments received.

3.10 Establish Legal Authority

The revised document is now ready for adoption by Council by by-law or by annexation to an existing emergency plan. The plan's legal authority is made possible through the Emergency Plans Act 1983, which gives explicit statutory power to municipalities to plan for emergencies (see section 4 of the Act). This could include energy contingency planning efforts. The by-law number (once Council adoption has been received) should be recorded in the plan.

For guidance on how to complete a Municipal Oil Shortage Contingency Plan, copies of completed municipal plans may be obtained from the Ministry of Energy. A variety of plans have been completed that demonstrate how different municipal structures (e.g. regions, counties, single tier municipalities) undertook municipal oil shortage contingency plans.

APPENDIX A

MUNICIPAL GUIDELINES: STEPS TO BE TAKEN IN THE PREPARATION OF AN OIL SHORTAGE CONTINGENCY PLAN

APPENDIX B

CLASSIFICATION OF GOVERNMENT SERVICES

APPENDIX B

The federal government, through the Energy Supplies Allocation Board (ESAB), has placed wholesale fuel purchases into three priority groups for the purposes of its petroleum produce allocation program. The services and industries are classified within the categories:

(A) Critical
(B) Essential
(C) Non-essential

Government operations are classified as category C, except for emergency services. The federal classification scheme is as follows:

SUMMARY OF FEDERAL GOVERNMENT CLASSIFICATION CATEGORIES

	Controlled Petroleum Products Except Those Used for Space Heating/Cooling	Controlled Petroleum Products Used for Space Heating/ Cooling
Agriculture and food processing (primary agriculture, food production and the processing of essential perishable food products)	A	C
Air flights in and to remote areas	A	C
Commercial fishing	A	C
DND operations	A	C
Energy production and distribution	A	C
Fire, police, ambulance and other emergency services	A	C
Hospitals and health care	A	A
Marine bunkering (International, in or to remote areas*)	A	C
Mass public transportation (road, rail, water)	A	C

* An IEA Commitment.

	Controlled Petroleum Products Except Those Used for Space Heating/Cooling	Controlled Petroleum Products Used for Space Heating/ Cooling
Agriculture and food processing (other agriculture and food and beverage industries not included in Category A)	B	C
Air flights (other than in or to remote areas)	B	C
Car and truck rentals	B	C
Construction	B	C
Forestry	B	C
Freight transportation (road, rail, water)	B	C
Garbage collection	B	C
Manufacturing	B	C
Marine bunkering (other than international, remote areas)	B	C
Mining	B	C
Office buildings, stores (retail and wholesale) and warehouses	B	C
Postal services	B	C
Public utilities including telephone and water	B	C
Retail motor fuel outlets - diesel	B	C
Service industries (retail delivery, consumer service, etc.)	B	C
Snow removal, road maintenance (streets and highways)	B	C
Taxis	B	C
Hotels and motels	C	B
Residential, apartments and schools	C	B
Government operations not otherwise listed	C	C
Marinas	C	C
Recreational activities	C	C
Retail motor fuel outlets - gasoline	C	C
Unclassified	C	C

APPENDIX C

MUNICIPAL DEMAND RESTRAINT OPTIONS

MUNICIPAL DEMAND RESTRAINT OPTIONS

PRE-EMERGENCY	STAGE 1	STAGE 2	STAGE 3
TRANSPORTATION			
TRANSIT			
Promote public transit	Adjust transit services to meet changing demands Increase connections between transit systems	Use buses from intercity and charter carriers, churches, etc. Allow vanpools within transit Use school buses at non-school times	Use school buses during school times by modifying school hours Rehabilitate and place reserve fleet in service Suspend non-essential service (e.g. charters, tours) and use vehicles for regular service
TRAFFIC MANAGEMENT			
Computerize traffic signals Improve traffic signal timing	Replace fixed-time signals with actuated signals Control supply and cost of parking to encourage use of higher fuel-efficiency modes	Replace stop signs with yield Switch traffic signals to flashing yellow Remove unnecessary stop signs Restrict on-street parking	
HIGH OCCUPANCY VEHICLES (HOVs)			
	Designate HOV parking facilities	Designate exclusive lanes or roadways for buses or HOVs	Prohibit single-passenger vehicles in specific areas
RIDESHARING			
Promote area-wide and employment-based ridesharing		Increase rural carpool parking lots	Employment-based ridesharing for large employers

Once a measure is implemented, it will continue through all subsequent stages unless stated otherwise

MUNICIPAL DEMAND RESTRAINT OPTIONS

PRE-EMERGENCY	STAGE 1	STAGE 2	STAGE 3
ALTERNATIVE WORK SCHEDULES			
Promote flexible work schedules			Flexible work schedules mandatory for large employers
ALTERNATIVE TRAVEL MODES			
	Promote walking, cycling etc.	Legalize and/or promote para-transit (shared-ride taxis etc.) Computerize and/or centralize taxi dispatching Abolish taxi cruising	
INTERCITY TRANSPORTATION			
	Promote carpools, buses and trains to replace short-haul flights		
CONSTRAINTS ON CONSUMER BEHAVIOUR			
Promote adherence to, and increase enforcement of, existing speed limits	Promote fuel-efficient use of private vehicles by trip planning, good driving habits etc.	Reduce use of delivery services	Regulate or reduce retail shopping hours
SUPPLY AND DISTRIBUTION MEASURES			
		Regulate service station hours	

MUNICIPAL DEMAND RESTRAINT OPTIONS

PRE-EMERGENCY	STAGE 1	STAGE 2	STAGE 3
SPACE CONDITIONING			
	Reduce heating temperatures (18 deg. C. occupied bldg. 13 deg. C. unoccupied bldg.) Raise cooling temperatures to 26 deg. when occupied. Shut off air conditioning and humidification when building unoccupied Reduce excessive ventilation through - fresh air intakes - humidification - climatization - exhaust systems Promote or increase long-term conservation measures e.g. - insulation of buildings - insulation of hot water heaters - flow restrictors on faucets and showers - instal thermostat controls - weatherstrip and caulk - reduce hot water temperatures - change from steam to hot water heating Energy audits	Reduce heating temperatures (16 deg. C. occupied bldg. 13 deg. C. unoccupied bldg.) Reduce building operating hours Fuel substitution by using - portable space heaters - wood for traditional fuels - natural gas logs in fire-places	Reduce heating temperatures (16 deg. C. occupied bldg. 10 deg. C. unoccupied bldg.) Close non-essential buildings

MUNICIPAL DEMAND RESTRAINT OPTIONS

PRE-EMERGENCY	STAGE 1	STAGE 2	STAGE 3
OPERATIONAL CONTROLS			
	Oil furnace tune-ups and retrofits Use alternative fuels, fuel substitution (dual firing if available) Promote use of smaller more fuel-efficient equipment Promote reduced equipment idling Promote lower process heat temperatures Promote waste heat recovery	Coordinate maintenance/holiday schedules with shortage	
COMMUNICATIONS			
	Increased use of teleconferencing and telecommunications		

APPENDIX D

TRANSIT CALCULATIONS

APPENDIX D

Public transit (primarily in the larger urban centres) can play a significant role in reducing community-wide fuel consumption.

The following assumptions were used by M.M. Dillon Ltd. in developing the factors identified in section 3.5.2.1.

- each household generates 10 trips/day (Institute of Transportation Engineers).
- energy fuel shortages of 5%, 10%, 15% will generate a similar reduction in the number of auto trips.
- for calculation purposes 85% of the trips are local (i.e. within the municipality).
- trips to be accommodated can be split into work and non-work categories. The longer the fuel shortage the greater the number of work trips that will have to be accommodated.

Short-term (1-2 months)	30% work	70% non-work
Long-term (3-6 months)	42% work	58% non-work

- the number of non-work trips is not considered to be of significance during peak periods of operation.

Calculation Steps

Determine the number of households (H) in the transit service area		--	H
Daily trips generated (households X 10)		--	10X H
Calculate daily trip reduction based on fuel shortages of 5%, 10% and 15% (which are examples only).			
5% Shortage	(.05 x 10X)	--	.5X H
10% Shortage*	(.10 x 10X)	--	1.0X H
15% Shortage	(.15 x 10X)	--	1.5X H

* For example, it is expected that a 10% shortage of fuel will result in a 10% reduction in trips by auto.

Local trips represent 85% of the total number of trips

5% Shortage	(.85 x .5X)	--	.425X H
10% Shortage	(.85 x 1.0X)	--	.85X H
15% Shortage	(.85 x 1.5X)	--	1.275X H

Work trips are those which will have the greatest impact on transit during peak hours. The longer the fuel shortage the more work trips will have to be accommodated.

Short-term		- 30% - work	- 70% - non-work
Long-term		- 42% - work	- 58% - non-work
5% Shortage	Short-term	(.30 x .425X H)	-- .128X H
	Long-term	(.42 x .425X H)	-- .179X H
10% Shortage	Short-term	(.30 x .85X H)	-- .255X H
	Long-term	(.42 x .85X H)	-- .357X H
15% Shortage	Short-term	(.30 x 1.275X H)	- .383X H
	Long-term	(.42 x 1.275X H)	- .534X H

- Actual trips accommodated will be approximately 85% of total trips affected. Of those:
  - 25% will shift to transit;[1]
  - 32% of trips will take place in the peak period; and
  - 60% of the peak period trips will take place in the peak hour.

The above statistical assumptions represent the basis for the peak period factor of .068 (i.e. .85 x .25 x .32) and peak hour factor of .040 (i.e. .85 x .25 x .32 x .60) which were used in section 3.5.2.1. The following calculations show how these factors were applied.

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1. Based on data presented in the Metro Toronto Transportation Study, Phase II, Background Report - Contingency Planning Study.

PEAK PERIOD[1]

5% Shortage	Short-term	(.128 x H) x (.068) = (.009 x H)
	Long-term	(.179 x H) x (.068) = (.012 x H)
10% Shortage	Short-term	(.255 x H) x (.068) = (.017 x H)
	Long-term	(.357 x H) x (.068) = (.024 x H)
15% Shortage	Short-term	(.383 x H) x (.068) = (.026 x H)
	Long-term	(.534 x H) x (.068) = (.036 x H)

PEAK HOUR[2]

5% Shortage	Short-term	(.128 x H) x (.040) = (.005 x H)
	Long-term	(.179 x H) x (.040) = (.007 x H)
10% Shortage	Short-term	(.255 x H) x (.040) = (.010 x H)
	Long-term	(.357 x H) x (.040) = (.014 x H)
15% Shortage	Short-term	(.383 x H) x (.040) = (.015 x H)
	Long-term	(.534 x H) x (.040) = (.021 x H)

---

1. Peak period factor .068 is the product of (.85 x .25 x .32).

2. Peak hour factor .040 is the product of (.85 x .25 x .32 x .60).

APPENDIX E

INFORMATION FORM
FOR
MAJOR EMPLOYERS

APPENDIX E

INFORMATION FORM

1. BACKGROUND

Organization name and address: _____
_____
_____

Phone number: _____

Your name and title: _____
_____

Number of employees at
this location: _____

% of employees who travel individually to work by private auto ____

% of employees who travel to work by carpool or vanpool _____

% of employees who travel to work by public transit _____

% of employees who travel to work by other means (e.g. walking or bicycle) ___

Do you provide on site parking? YES ___ NO __
Free? YES ___ NO __
Number of spaces ____

2. PRESENT ENERGY CONSERVATION MEASURES

Does your organization have a vanpooling program? YES ___ NO ___

If YES, how many years has the program been in place? _____
If YES, describe the program. _____
_____
_____

If YES, do you match rides? YES ___ NO ___
If YES, do you have a program coordinator? YES ___ NO ___

Does your organization have a carpooling program? YES ___ NO ___

If YES, how many years has the program been in place? _____
If YES, describe the program. _____
_____
_____

If YES, do you match rides? YES ____ NO ____
If YES, do you have a program coordinator? YES ____ NO ____

3. OIL SHORTAGE SITUATION

In the event of an oil shortage, would your organization consider implementing any of the following measures?

	YES	NO
o Assisting in setting up a ridesharing program	___	___
o Subsidizing employee transit fares for travel to and from work	___	___
o Allocating preferred parking spaces (i.e. those closest to the building's entrance) to high-occupancy vehicles (i.e. with one or more passenger(s))	___	___
o Financially assisting employee groups in the purchase of a van or mini-bus for travel to and from work	___	___
o Establishing a bulletin board to display publicity materials encouraging and describing ridesharing and other energy conservation measures	___	___
o Appointing a part-time energy conservation coordinator (if no one is already in place) to promote and implement any of the above measures and to maintain contact with the municipality and the Ontario Ministry of Energy during the oil shortage	___	___
If YES, please indicate the position within the organization likely to be appointed as coordinator _____		
o Would you be interested in receiving information on the preparation of energy contingency plans for the private sector?	___	___

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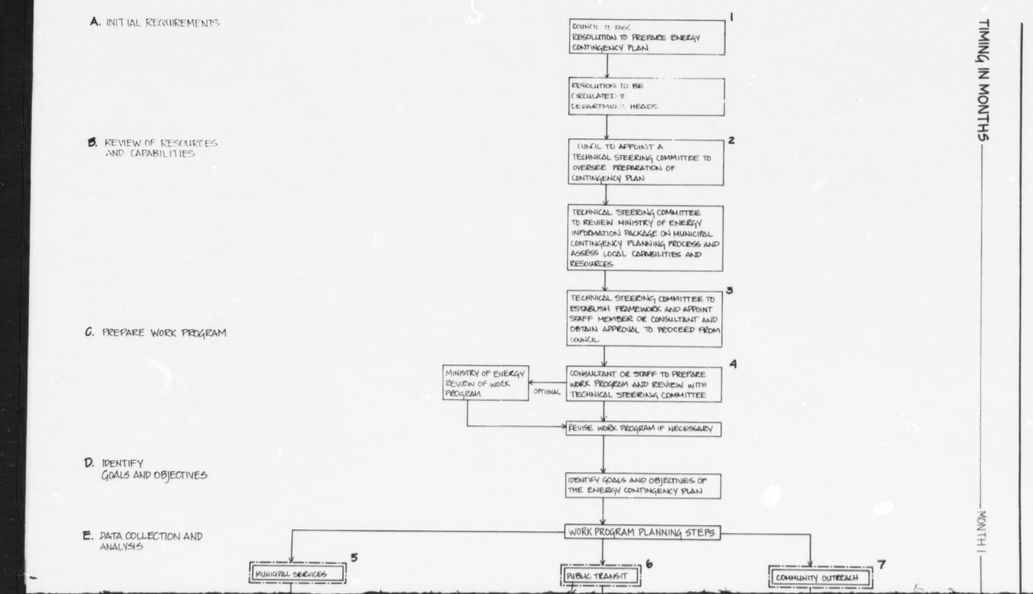
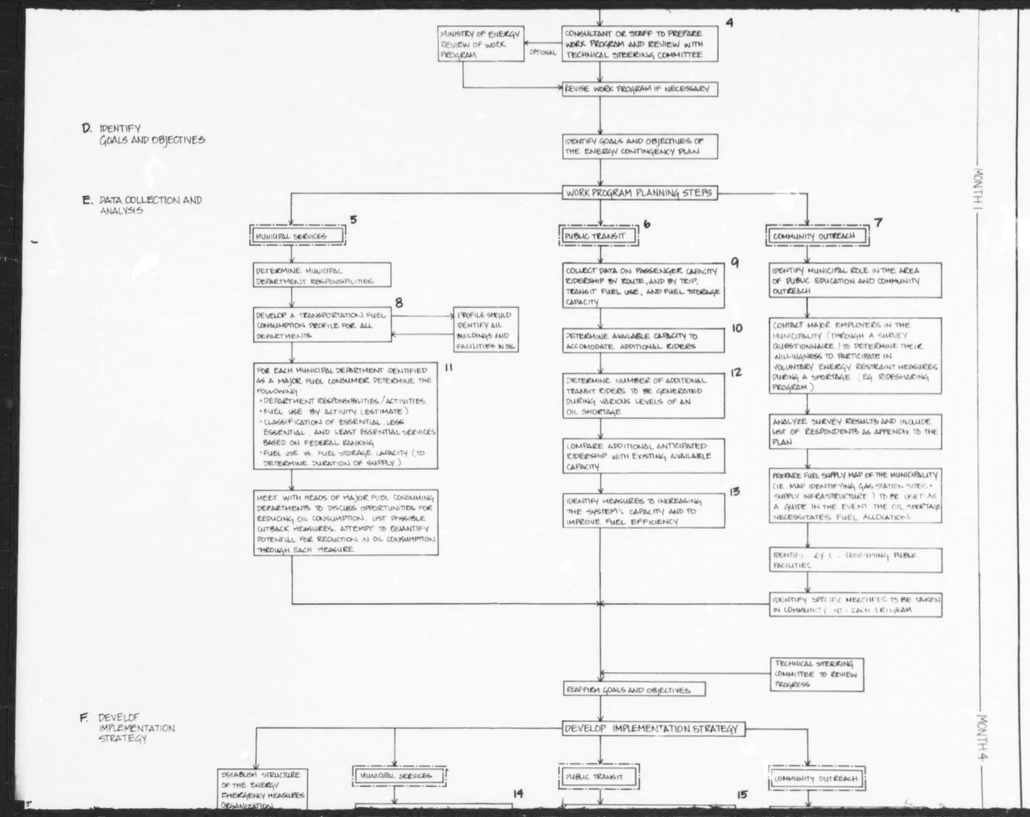
MUNICIPAL GUIDELINES: STEPS TO BE TAKEN IN THE PREPARATION OF AN OIL SHORTAGE CONTINGENCY PLAN


A. INITIAL REQUIREMENTS
B. REVIEW OF RESOURCES AND CAPABILITIES
C. PREPARE WORK PROGRAM
D. IDENTIFY GOALS AND OBJECTIVES
E. DATA COLLECTION AND ANALYSIS
1
COUNCIL TO PASS RESOLUTION TO PREPARE ENERGY CONTINGENCY PLAN
RESOLUTION TO BE CIRCULATED TO DEPARTMENTAL HEADS
2
COUNCIL TO APPOINT A TECHNICAL STEERING COMMITTEE TO OVERSEE PREPARATION OF CONTINGENCY PLAN
TECHNICAL STEERING COMMITTEE TO REVIEW MINISTRY OF ENERGY INFORMATION PACKAGE ON MUNICIPAL CONTINGENCY PLANNING PROCESS AND ASSESS LOCAL CAPABILITIES AND RESOURCES
3
TECHNICAL STEERING COMMITTEE TO ESTABLISH FRAMEWORK AND APPOINT STAFF MEMBER OR CONSULTANT AND OBTAIN APPROVAL TO PROCEED FROM COUNCIL
4
CONSULTANT OR STAFF TO PREPARE WORK PROGRAM AND REVIEW WITH TECHNICAL STEERING COMMITTEE
MINISTRY OF ENERGY REVIEW OF WORK PROGRAM
OPTIONAL
REVISE WORK PROGRAM IF NECESSARY
IDENTIFY GOALS AND OBJECTIVES OF THE ENERGY CONTINGENCY PLAN
WORK PROGRAM PLANNING STEPS
5
MUNICIPAL SERVICES
6
PUBLIC TRANSIT
7
COMMUNITY OUTREACH
TIMING IN MONTHS
MONTH 1

1. URGENCY FOR CONTINGENCY PLANNING AND/OR THREAT OF POTENTIAL SHORTAGE TO BE IDENTIFIED BY MUNICIPAL DEPARTMENT
2. TECHNICAL STEERING COMMITTEE MEMBERSHIP SHOULD CONSIST OF EMERGENCY MEASURES ORGANIZATION OR MUNICIPAL ENERGY COORDINATOR, CAO, KEY MUNICIPAL DEPARTMENT HEADS AND A REPRESENTATIVE OF THE LOCAL OIL INDUSTRY. THE COMMITTEE IS TO MEET REGULARLY THROUGHOUT THE STUDY TO REVIEW PROGRESS.
3. QUALIFICATIONS OF STAFF OR CONSULTANT
   - FAMILIAR WITH MUNICIPAL ORGANIZATION'S STRUCTURE AND STAFF
   - KNOWLEDGEABLE OF SERVICES AND ACTIVITIES OFFERED BY THE MUNICIPALITY
   - FAMILIAR WITH MUNICIPAL FUEL CONSUMPTION REQUIREMENTS
   - EXCELLENT COMMUNICATIONS SKILLS
   - PREVIOUS EXPERIENCE IN CONTINGENCY PLANNING
4. THE WORK PROGRAM SHOULD ALSO BE CIRCULATED TO OTHER INDIVIDUALS TO BE INVOLVED IN THE PLAN. THIS WOULD PROVIDE A GOOD OPPORTUNITY FOR FEEDBACK AND MAY GENERATE INTEREST IN THE STUDY
5. THE INTENT IS TO MAINTAIN A HIGH LEVEL OF MUNICIPAL SERVICE WHILE REDUCING FUEL CONSUMPTION WHERE POSSIBLE
6. TRANSIT WILL BE RELIED UPON TO ACCOMODATE MORE RIDERS SINCE PRIVATE AUTO USE WILL BE DISCOURAGED
7. THROUGH PUBLIC EDUCATION AND COMMUNITY OUTREACH PROGRAMS, THE MUNICIPALITY WILL BE ENCOURAGING FUEL CONSUMPTION REDUCTION IN THE COMMUNITY AT LARGE.
8. PROFILE SHOULD CONSIDER FUEL CONSUMED BY MUNICIPAL VEHICLES AND EQUIPMENT AS WELL AS BY PRIVATE AUTO USE ON MUNICIPAL TIME
9. TRANSIT MANAGERS SHOULD BE INVOLVED IN DATA COLLECTION
10. PEAK HOUR (IE. AM + PM) RIDERSHIP TO BE CONSIDERED INITIALLY
11. TYPICAL MAJOR FUEL CONSUMERS AT THE REGIONAL OR COUNTY LEVEL INCLUDE THE POLICE, PUBLIC WORKS, HEALTH AND SOCIAL SERVICES DEPARTMENTS. AT THE LOCAL MUNICIPAL LEVEL, MAJOR FUEL CONSUMERS INCLUDE THE PUBLIC WORKS AND PARKS AND RECREATION DEPARTMENTS
12. SEE GUIDELINES FOR THE PREPARATION OF OIL SHORTAGE CONTINGENCY PLANS FOR ASSUMPTIONS TO BE CONSIDERED IN DETERMINING PERCENTAGE OF AUTO DRIVERS TO BE DIVERTED TO THE TRANSIT SYSTEM
13. MEASURES TO BE CONSIDERED INCLUDE:
   - ADDING BUSES
   - REDUCING RUNNING TIME
   - ENCOURAGING VARIABLE WORK HOURS
14. RECOMMENDED MEASURES SHOULD BE GENERAL IN NATURE AND THE PLAN SHOULD GIVE EACH MUNICIPAL DEPARTMENT HEAD


D. IDENTIFY GOALS AND OBJECTIVES
E. DATA COLLECTION AND ANALYSIS
F. DEVELOP IMPLEMENTATION STRATEGY
MONTH 1
MONTH 4
MINISTRY OF ENERGY REVIEW OF WORK PROGRAM
OPTIONAL
CONSULTANT OR STAFF TO PREPARE WORK PROGRAM AND REVIEW WITH TECHNICAL STEERING COMMITTEE
4
REVISE WORK PROGRAM IF NECESSARY
IDENTIFY GOALS AND OBJECTIVES OF THE ENERGY CONTINGENCY PLAN
WORK PROGRAM PLANNING STEPS
MUNICIPAL SERVICES
5
PUBLIC TRANSIT
6
COMMUNITY OUTREACH
7
DETERMINE MUNICIPAL DEPARTMENT RESPONSIBILITIES
DEVELOP A TRANSPORTATION FUEL CONSUMPTION PROFILE FOR ALL DEPARTMENTS
8
PROFILE SHOULD IDENTIFY ALL BUILDINGS AND FACILITIES WITH
FOR EACH MUNICIPAL DEPARTMENT IDENTIFIED AS A MAJOR FUEL CONSUMER, DETERMINE THE FOLLOWING:
• DEPARTMENT RESPONSIBILITIES / ACTIVITIES
• FUEL USE BY ACTIVITY (ESTIMATE)
• CLASSIFICATION OF ESSENTIAL (LOSS ESSENTIAL) AND LEAST ESSENTIAL SERVICES BASED ON FEDERAL RANKING
• FUEL USE VS. FUEL STORAGE CAPACITY (TO DETERMINE DURATION OF SUPPLY)
11
MEET WITH HEADS OF MAJOR FUEL CONSUMING DEPARTMENTS TO DISCUSS OPPORTUNITIES FOR REDUCING OIL CONSUMPTION, UNIT PAYABLE OUTBACK MEASURES, ATTEMPT TO QUANTIFY POTENTIAL FOR REDUCTION IN OIL CONSUMPTION THROUGH EACH MEASURE
COLLECT DATA ON PASSENGER CAPACITY RIDERSHIP BY ROUTE, AND BY TRIP, TRANSIT FUEL USE, AND FUEL STORAGE CAPACITY
9
DETERMINE AVAILABLE CAPACITY TO ACCOMODATE ADDITIONAL RIDERS
10
DETERMINE NUMBER OF ADDITIONAL TRANSIT RIDERS TO BE GENERATED DURING VARIOUS LEVELS OF AN OIL SHORTAGE
12
COMPARE ADDITIONAL ANTICIPATED RIDERSHIP WITH EXISTING AVAILABLE CAPACITY
IDENTIFY MEASURES TO INCREASING THE SYSTEM'S CAPACITY AND TO IMPROVE FUEL EFFICIENCY
13
IDENTIFY MUNICIPAL ROLE IN THE AREA OF PUBLIC EDUCATION AND COMMUNITY OUTREACH
CONTACT MAJOR EMPLOYERS IN THE MUNICIPALITY (THROUGH A SURVEY QUESTIONNAIRE) TO DETERMINE THEIR AWARENESS TO PARTICIPATE IN VOLUNTARY ENERGY RESTRAINT MEASURES DURING A SHORTAGE (EG. RIDESHARING PROGRAM)
ANALYZE SURVEY RESULTS AND INCLUDE LIST OF RESPONDENTS AS APPENDIX TO THE PLAN
PREPARE FUEL SUPPLY MAP OF THE MUNICIPALITY (IE. MAP IDENTIFYING GAS STATION SITES + SUPPLY INFRASTRUCTURE) TO BE USED AS A GUIDE IN THE EVENT THE OIL SHORTAGE NECESSITATES FUEL ALLOCATION
IDENTIFY CITY (IES) CONTAINING PUBLIC FACILITIES
IDENTIFY SPECIFIC MEASURES TO BE TAKEN IN COMMUNITY (IES) EACH PROGRAM
TECHNICAL STEERING COMMITTEE TO REVIEW PROGRESS
REAFFIRM GOALS AND OBJECTIVES
DEVELOP IMPLEMENTATION STRATEGY
ESTABLISH STRUCTURE OF THE ENERGY EMERGENCY MEASURES ORGANIZATION
MUNICIPAL SERVICES
14
PUBLIC TRANSIT
15
COMMUNITY OUTREACH

5. PROFILE SHOULD IDENTIFY FUEL CONSUMING VEHICLES AND EQUIPMENT AS WELL AS BY PRIVATE AUTO USE ON MUNICIPAL TIME
9. TRANSIT MANAGERS SHOULD BE INVOLVED IN DATA COLLECTION
10. PEAK HOUR (IE. AM + PM) RIDERSHIP TO BE CONSIDERED INITIALLY
11. TYPICAL MAJOR FUEL CONSUMERS AT THE REGIONAL OR COUNTY LEVEL INCLUDE THE POLICE, PUBLIC WORKS, HEALTH AND SOCIAL SERVICES DEPARTMENTS. AT THE LOCAL MUNICIPAL LEVEL, MAJOR FUEL CONSUMERS INCLUDE THE PUBLIC WORKS AND PARKS AND RECREATION DEPARTMENTS
12. SEE GUIDELINES FOR THE PREPARATION OF OIL SHORTAGE CONTINGENCY PLANS FOR ASSUMPTIONS TO BE CONSIDERED IN DETERMINING PERCENTAGE OF AUTO DRIVERS TO BE DIVERTED TO THE TRANSIT SYSTEM
13. MEASURES TO BE CONSIDERED INCLUDE:
    - ADDING BUSES
    - REDUCING RUNNING TIME
    - ENCOURAGING VARIABLE WORK HOURS
14. RECOMMENDED MEASURES SHOULD BE GENERAL IN NATURE AND THE PLAN SHOULD GIVE EACH MUNICIPAL DEPARTMENT HEAD SUFFICIENT FLEXIBILITY TO SELECT SPECIFIC CUTBACK MEASURES. MUNICIPAL DEPARTMENT HEADS WILL BE BEST ABLE TO IDENTIFY APPROPRIATE MEASURES DEPENDING ON THE CIRCUMSTANCES (EG. SEASON)
15. PLAN SHOULD REQUIRE TRANSIT MANAGER TO THOROUGHLY REVIEW THE SYSTEM BEFORE RECOMMENDING SPECIFIC MEASURES TO ACCOMODATE ADDITIONAL RIDERS
16. PREPARE DIAGRAM(S) SHOWING COMMUNICATION LINKAGES BETWEEN ROLE PLAYERS INVOLVED IN THE IMPLEMENTATION OF THE PLAN
17. THE REVIEW PROCESS IS CRITICAL. ALL COMMENTS SHOULD BE CONSIDERED IN PREPARING THE FINAL SUBMISSION

OUTBACK MEASURES. ATTEMPT TO QUANTIFY POTENTIAL FOR REDUCTION IN OIL (CONSUMPTION) THROUGH EACH MEASURE.

IMPROVE FUEL EFFICIENCY

IDENTIFY CITY'S CONSERVATION PUBLIC FACILITIES

IDENTIFY SPECIFIC MEASURES TO BE TAKEN IN CONSUMPTION (MEASURE EACH MEASURE)

TECHNICAL STEERING COMMITTEE TO REVIEW PROGRESS

REAFFIRM GOALS AND OBJECTIVES

F. DEVELOP IMPLEMENTATION STRATEGY

DEVELOP IMPLEMENTATION STRATEGY

ESTABLISH STRUCTURE OF THE ENERGY EMERGENCY MEASURES ORGANIZATION

MUNICIPAL SERVICES

RECOMMEND MEASURES WHICH WILL MAINTAIN A HIGH LEVEL OF MUNICIPAL SERVICE WHILE REDUCING FUEL CONSUMPTION

14

PUBLIC TRANSIT

RECOMMEND MEASURES WHICH WILL MAXIMIZE THE EFFICIENCY OF PUBLIC TRANSIT AS AN ALTERNATIVE TO PRIVATE AUTO USE

15

COMMUNITY OUTREACH

ENSURE THAT GOALS AND OBJECTIVES OF COMMUNITY OUTREACH PROGRAM ARE COMPATIBLE TO THOSE OF THE FEDERAL + PROVINCIAL GOVERNMENTS

IDENTIFY ALL ROLE PLAYERS TO BE INVOLVED IN THE PLANS IMPLEMENTATION. DESCRIBE THE RESPONSIBILITIES OF EACH ROLE PLAYER IN IMPLEMENTING THE IDENTIFIED MEASURES

16

G. TESTING PROCEDURE

H. REVIEW AND UPDATING PROCESS

DEVELOP TESTING PROCEDURE FOR THE PLAN

DEVELOP UPDATING AND REVIEW PROCESS FOR THE PLAN

TECHNICAL STEERING COMMITTEE PROGRESS REVIEW

I. PREPARATION OF THE PLAN ITSELF

PREPARE OIL SHORTAGE CONTINGENCY PLAN

REVIEW OF PLAN BY LOCAL MUNICIPAL COUNCILS + LOCAL MUNICIPAL DEPARTMENT HEADS

MINISTRY OF ENERGY REVIEW

REVIEW OF PLAN BY REGIONAL (COUNTY) COUNCILS (IF APPLICABLE)

17

TEST PLAN

J. ESTABLISH LEGAL AUTHORITY

REVISE PLAN + PREPARE FINAL SUBMISSION FOR COUNCIL APPROVAL AND ADOPTION BY-LAW

MONTH 4

MONTH 5

MONTH 6

DIAGRAM BASED ON MINISTRY OF ENERGY "SAMPLE MUNICIPAL PLANNING PROCESS FOR PREPARATION OF ENERGY CONTINGENCY PLAN FOR OIL EMERGENCIES"

OUTBACK MEASURES. ATTEMPT TO QUANTIFY POTENTIAL FOR REDUCTION IN OIL (CONSUMPTION) THROUGH EACH MEASURE.

IMPROVE FUEL EFFICIENCY

IDENTIFY CITY'S CONSERVATION PUBLIC FACILITIES

IDENTIFY SPECIFIC MEASURES TO BE TAKEN IN CONSUMPTION (MEASURE EACH MEASURE)

TECHNICAL STEERING COMMITTEE TO REVIEW PROGRESS

REAFFIRM GOALS AND OBJECTIVES

DEVELOP IMPLEMENTATION STRATEGY

ESTABLISH STRUCTURE OF THE ENERGY EMERGENCY MEASURES ORGANIZATION

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16

DEVELOP TESTING PROCEDURE FOR THE PLAN

DEVELOP UPDATING AND REVIEW PROCESS FOR THE PLAN

TECHNICAL STEERING COMMITTEE PROGRESS REVIEW

PREPARE OIL SHORTAGE CONTINGENCY PLAN

REVIEW OF PLAN BY LOCAL MUNICIPAL COUNCILS + LOCAL MUNICIPAL DEPARTMENT HEADS

MINISTRY OF ENERGY REVIEW

REVIEW OF PLAN BY REGIONAL (COUNTY) COUNCILS (IF APPLICABLE)

17

TEST PLAN

REVISE PLAN + PREPARE FINAL SUBMISSION FOR COUNCIL APPROVAL AND ADOPTION BY-LAW

MONTH 4

MONTH 5

MONTH 6

DIAGRAM BASED ON MINISTRY OF ENERGY "SAMPLE MUNICIPAL PLANNING PROCESS FOR PREPARATION OF ENERGY CONTINGENCY PLAN FOR OIL EMERGENCIES"